

CLAIMS LISTING

RECEIVED  
CENTRAL FAX CENTER  
SEP 06 2006

1 - 23 (Withdrawn)

24. (Canceled)

25 - 34 (Withdrawn)

35. (Original) A liquid dispenser comprising:

a resilient, enclosed container enclosed but for having at one end of the container a neck open at a container outlet opening,

a cap having an end wall and a side wall of extending upwardly from the end wall to a remote portion of the side wall,

a cap outlet opening through the side wall,

the cap received on the neck with the neck extending into the cap,

the remote portion of the cap about the neck engaging the neck to form fluid impermeable seal therewith,

a passageway defined between the neck and the side wall of the cap outwardly of the neck and inwardly of the side wall open to both the container outlet opening and the cap outlet opening,

wherein when the container is in an inverted position with the neck located below the remainder of the container, the container outlet opening is at a height which is below a height of the cap outlet opening,

the side wall of the cap being disposed about an axis,

the container outlet opening disposed coaxially within the side wall of the cap,

an impeller disposed in the cap above the end wall of the cap and at least partially below the container outlet opening journaled for rotation about the axis,

the impeller adapted on rotation to receive fluid above the impeller from the container outlet opening and to direct liquid radially outwardly into the passageway such that rotation of the impeller forces fluid into the passageway raising the level of fluid in the passageway to a height above the height of the cap outlet opening such that fluid flows out of the cap outlet opening,

the impeller when not rotating not preventing air flow from the cap outlet opening to the container outlet opening.

36. (Original) A liquid dispenser as claimed in claim 35 wherein the impeller when not rotating not preventing air flow or fluid flow between the container and cap.

37. (Original) A liquid dispenser as claimed in claim 35 wherein the impeller forms with the cap and container neck a centrifugal pump to direct fluid from the container outlet opening radially into the passageway.

38. (Original) A liquid dispenser as claimed in claim 37 wherein the cap is circular in cross-section about the axis, the neck of the container is circular in cross-section about the axis, and the passageway is annular about the axis.

39. (Original) A liquid dispenser as claimed in claim 35 wherein the impeller has a radial extent not substantially less than a radial extent of the container outlet opening.

40. (Original) A liquid dispenser as claimed in claim 35 wherein the impeller has a radial extent at least equal to a radial extent of the container outlet opening.

41. (Original) A liquid dispenser as claimed in claim 35 wherein the side wall of the cap has a lower cylindrical portion of a radius marginally greater than a radial extent of the impeller.

42. (Original) A liquid dispenser as claimed in claim 41 wherein the neck of the container has a lower cylindrical portion ending at the container outlet opening of a radius substantially the same as the radius of the lower cylindrical portion of the cap.

43. (Original) A liquid dispenser as claimed in claim 41 wherein the side wall of the cap opens upwardly from the lower cylindrical portion as a frustoconical portion.

44. (Original) A liquid dispenser as claimed in claim 35 wherein the container is resiliently deformable with an inherent shape having an inherent internal volume,

the container being resilient such that after being deformed by forces forcing the container to assume shapes different than its inherent shape and having volumes less than the inherent volume, on release from such forces, the resiliency of the container biases the container toward reassuming its inherent shape and creating a vacuum in the container,

when the container, in the inverted position, is deformed to the shapes different than the inherent shape, then liquid in the container is forced to flow out of the container via the container outlet opening through the passageway and out the cap outlet opening,

when a vacuum exists in the container with the container in an inverted position, liquid in the cap is drawn back into the container until the height of liquid in the cap is below the height of the container outlet opening and the container outlet opening is open to air in the cap such that air in the cap flows under gravity upward through the neck into the container to decrease vacuum in the container,

the container outlet opening at a height below a height of liquid in the container such that when pressure in the container is atmospheric pressure, due to gravity, the liquid from the container fills the neck and passageway to a height above the height of the container outlet opening and below the height of the cap outlet opening.

45. (Original) A liquid dispenser as claimed in claim 35 wherein the cap is movable relative the neck between a closed position in which the cap prevents fluid flow through the passageway and an open position in which the passageway is open to fluid flow.

46. (Original) A liquid dispenser as claimed in claim 45 wherein in the closed position, the end wall of the cap engages the neck to close the container outlet opening preventing fluid flow there through and, in the open position, the end wall is spaced away from the container outlet opening.

47. (Original) A liquid dispenser as claimed in claim 46 wherein the side wall of the cap is disposed coaxially about the neck and the cap is axially movable relative the neck between the open position and the closed position.

48. (Original) A liquid dispenser as claimed in claim 35 including a motor operatively coupled to the impeller,

the motor located below the end wall of the cap,

a rotatable shaft coaxial with the axis passing in a sealed relation through the end wall of the cap and coupled at a lower end to the motor and at an upper end to the impeller.

49. (Original) A liquid dispenser as claimed in claim 35 wherein the cap further includes a support portion extending downwardly to support surfaces to engage a planar work surface to support the dispenser in a vertical position for use in dispensing.

50. (Original) A liquid dispenser as claimed in claim 49 wherein the cap further includes a support portion extending downwardly to support surfaces to engage a planar work surface to support the dispenser in a vertical position for use in dispensing, and

a chamber is defined below the base of the cap within the support portion, the motor received within the chamber.

51. (Original) A liquid dispenser as claimed in claim 49 wherein the motor is an electric motor, and batteries for powering the motor are received in the chamber.

52. (Original) A liquid dispenser as claimed in claim 35 including a motor operatively coupled to rotate the impeller when activated, and a switch mechanism to activate the motor, and

wherein liquid may be dispensed by either rotation of the impeller on activation of the motor or by manually compressing the container.

53. (Original) A liquid dispenser as claimed in claim 52 including a mechanism for manual engagement to compress the container selected from one of a lever having a first portion which bears on a side surface of the container and a second portion available to be manually moved so as to urge the first portion to compress the side surface of the container and reduce the internal volume, and

a resilient bulbous portion forming a portion of a side wall of the container for manual deformation to reduce the internal volume of the container.

54. (Canceled)

55. (Original) A liquid dispenser as claimed in claim 35 including a motor magnetically coupled to the impeller to rotate the impeller.

56. (Canceled)

57. (Canceled)

58. (Original) A liquid dispenser comprising:

a resilient, enclosed container enclosed but for having at one end of the container a neck open at a container outlet opening,

a cap having an end wall and a side wall extending upwardly from the end wall to a remote portion of the side wall,

a cap outlet opening through the side wall,

the cap received on the neck with the neck extending into the cap,

the remote portion of the cap about the neck engaging the neck to form fluid impermeable seal therewith,

a passageway defined between the neck and the side wall of the cap outwardly of the neck and inwardly of the side wall open to both the container outlet opening and the cap outlet opening,

the side wall of the cap being disposed about an axis,

the container outlet opening disposed coaxially within the side wall of the cap,

an impeller disposed in the cap above the end wall of the cap and at least partially below the container outlet opening journaled for rotation about the axis,

the impeller adapted on rotation to receive fluid above the impeller from the container outlet opening and to direct liquid radially outwardly into the passageway such that rotation of the impeller forces fluid into the passageway and out of the cap outlet opening.

59. (Original) A liquid dispenser as claimed in claim 58 wherein the cap is received on the neck for axial movement between an open position and a closed position,

in the closed position, the neck about the container outlet opening engages the side wall of the cap to prevent communication from the container outlet opening and the passageway,

in the open position, the neck about the container outlet opening is spaced from the side wall of the cap providing communication from the container outlet opening to the passageway.

60 – 75 (Withdrawn)